

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all previous listings and versions of the claims. No new matter has been introduced in amending the claims or in adding new claims.

1. (Currently Amended) An apparatus for deriving a state parameter of an individual, comprising:

a processor;

~~at least one of~~ a sensor for generating a sensor output signal comprising data indicative of a rate of heat flowing off said individual's body, and a sensor for generating a sensor output signal comprising data indicative of a resistance of said individual's skin to an electric current, said sensor output signals being directed to an electronic communication link with said processor;

wherein said processor automatically determines a context of said individual with a naïve Bayesian classifier and a linear regression by using ~~at least one of~~ said data indicative of the rate of heat flowing off said individual's body, and said data indicative of the resistance of said individual's skin to an electric current; and

wherein said processor utilizes said context to predict the energy expenditure of said individual.

2-6. (Cancelled)

7. (Previously presented) An apparatus according to claim 1, wherein said context comprises at least one of a resting and an active state of said individual.

8-10. (Cancelled)

11. (Previously presented) An apparatus according to claim 1, said processor generating caloric consumption data for said individual, the apparatus further comprising a display which identifies said caloric expenditure data and said caloric consumption data.

12. (Previously presented) An apparatus according to claim 11, further comprising an input device in electronic communication with said processor, said caloric consumption data being determined from information collected by said input device from said individual relating to foods eaten by said individual.

13. (Original) An apparatus according to claim 11, wherein said displayed information includes energy balance data.

14. (Original) An apparatus according to claim 11, wherein said displayed information includes a rate of weight loss or gain of said individual.

15. (Previously presented) An apparatus according to claim 11, wherein said displayed information includes information relating to one or more goals of said individual, said goals relating to the monitoring and status of one or more of caloric consumption, caloric expenditure, energy balance and rate of weight loss or gain for said individual.

16-23. (Cancelled)

24. (Previously presented) An apparatus according to claim 1, said apparatus further comprising a wearable sensor device including said sensors which is mounted on said individual, said processor being included in a computing device located separately from said sensor device, each of said computing device and said sensor device having transmitting and receiving circuitry for generating and receiving electronic signals which include said electronic communication link.

25. (Currently amended) A method of measuring a state parameter of an individual, comprising:

collecting data indicative of a resistance of said individual's skin to an electric current from a GSR sensor;

collecting data indicative of a rate of heat flowing off said individual's body;
utilizing a processor to automatically determine a context of said individual based on at least one of the data indicative of the resistance of said individual's skin to an electric current, and the data indicative of the rate of heat flowing off said individual's body; and
utilizing said context to predict an energy expenditure of said individual.

26-30. (Cancelled)

31. (Previously presented) A method according to claim 25, wherein said context comprises at least one of rest and active.

32. (Cancelled)

33. (Previously presented) A method according to claim 25, wherein the processor uses a naïve Bayesian classifier to determine the context.

34. (Cancelled)

35. (Previously presented) A method according to claim 25, further comprising generating caloric consumption data for said individual and displaying information based on said caloric expenditure data and said caloric consumption data.

36. (Original) A method according to claim 35, said caloric consumption data being generated from information collected from said individual relating to foods eaten by said individual.

37. (Original) A method according to claim 35, wherein said displayed information includes energy balance data.

38. (Original) A method according to claim 35, wherein said displayed information includes a rate of weight loss or gain of said individual.

39. (Original) A method according to claim 35, wherein said displayed information includes information relating to one or more goals of said individual, said goals relating to one or more of caloric consumption, caloric expenditure, energy balance and rate of weight loss or gain.

40-170. (cancelled)

171. (Previously presented) An apparatus for deriving a state parameter of an individual, comprising:

a processor;

a sensor for generating a sensor output signal comprising data indicative of a rate of heat flowing off said individual's body;

a sensor for generating a sensor output signal comprising data indicative of a resistance of said individual's skin to an electric current, said sensor output signals being directed to an electronic communication link with said processor;

wherein said processor automatically determines a context of said individual by using said data indicative of the rate of heat flowing off said individual's body, and said data indicative of the resistance of said individual's skin to an electric current; and

wherein said processor utilizes said context to predict the energy expenditure of said individual.

172. (Previously presented) The apparatus according to Claim 171, wherein the processor uses a naïve Bayesian classifier and a linear regression to determine the context.

173. (Previously presented) The apparatus according to Claim 171, wherein the processor uses a regression algorithm to determine each context.

174. (Previously presented) The apparatus according to Claim 171, wherein the processor computes a longitudinal accelerometer average.

175. (Previously presented) The apparatus according to Claim 171, wherein the processor computes a transverse accelerometer sum of average differences.

176. (Currently amended) The apparatus according to Claim 171, wherein the processor computes a heat flux ~~high gain average variance~~.

177. (Previously presented) The apparatus according to Claim 171, wherein the processor computes a vector sum of transverse and longitudinal accelerometer sum of absolute differences.

178. (Previously presented) The apparatus according to Claim 171, wherein the processor computes a basal metabolic rate.

179. (Currently amended) The apparatus according to Claim 171, wherein the processor further comprises a context detector, the context detector comprising a naïve Bayesian classifier for predicting whether a context of the individual using at least one of a longitudinal accelerometer average, a transverse accelerometer sum of average differences and a heat flux ~~high gain average variance~~.